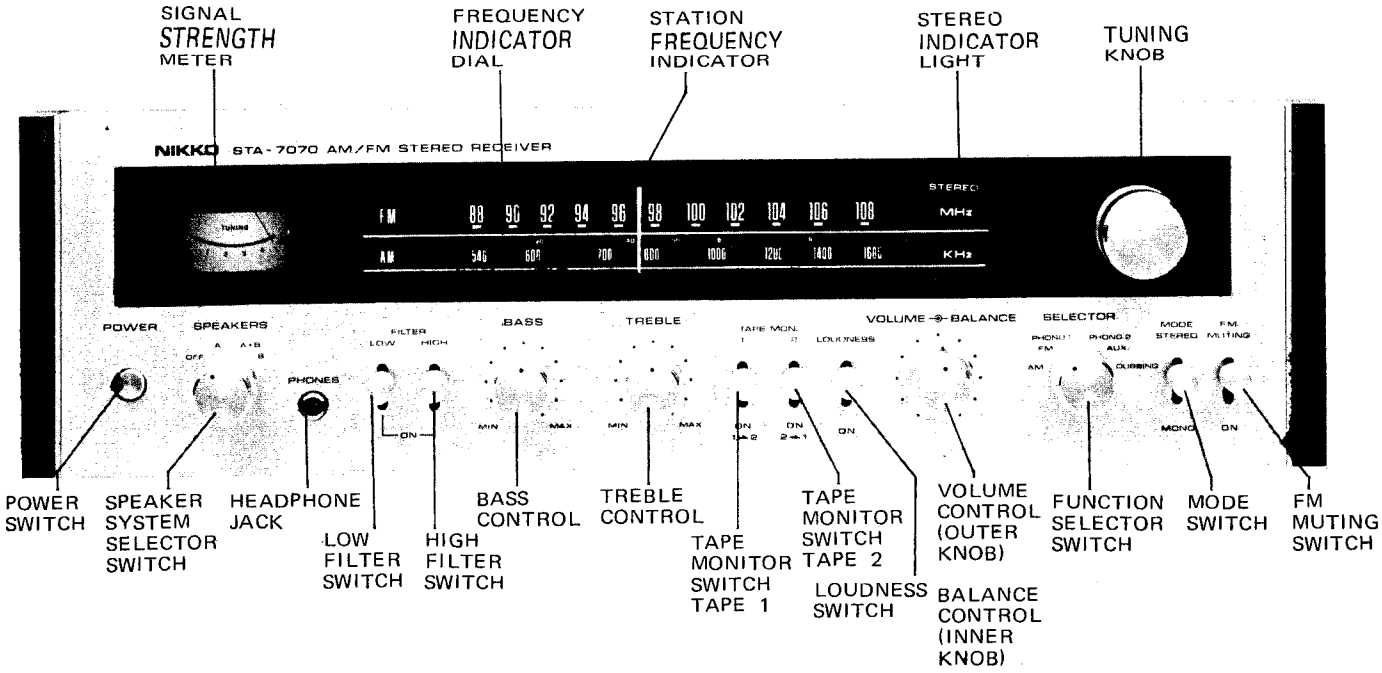
NIKKO

am-fm-multiplex stereo receiver model sta **7070** *owner's manual*

SPECIFICATIONS



FM TUNER SECTION

Sensitivity	IHF	2.0μV
FM Muting Sensitivity		30μV
Image Rejection	at 98 MHz	80dB
IF Rejection	at 98 MHz	90dB
S/N		60dB
Capture Ratio		2.5dB
Distortion		0.5%
Stereo Separation	at 1000 Hz	38dB
Carrier Leak	19 KHz & 38 KHz	50dB
Selectivity	±400 KHz	50dB
AM Suppression Ratio		
(FM 400 Hz 100%, AM 1000 Hz 30%)		40dB
4 CH. Composite Output		180mV
FM Antenna Impedance		300 ohm/75 ohm

AM TUNER SECTION

Sensitivity	S/N = 20dB	150μV/m
Image Rejection	at 1000 KHz	45dB
IF Rejection	at 1000 KHz	40dB
Selectivity	±10 KHz	25dB

AMPLIFIER SECTION

Music Power	IHF 8 ohms	90W
	4 ohms	130W
RMS Power Rating	Single CH. Driven	
	8 ohms	40W/40W
	4 ohms	50W/50W
	Both CH. Driven	
	8 ohms	34W+34W
	4 ohms	43W+43W
Power Response	±1dB 0.5% T. H. D.	10 Hz–40 KHz
Frequency Response	±1dB Main Input	10 Hz–50 KHz
	AUX Input	20 Hz–50 KHz
Distortion	Rated Output	0.5%
	1W Output	0.1%
Intermodulation	1W Output	0.2%
Input Sensitivity/Impedance		
	Main in	1100 mV/100K ohm
	PHONO 1 & 2	2.2 mV/50K ohm
	AUX 1	160 mV/100K ohm
	AUX 2	320 mV/120K ohm
	TAPE MON. 1 & 2	160 mV/100K ohm
S/N	PHONO	65dB
	Other	80dB

Tone Control	Bass at 70 Hz	±10dB
	Treble at 10 KHz	±10dB
Loudness	at 70 Hz	+9dB
	at 10 KHz	+5.5dB
Filter	Low Filter at 70 Hz	−8dB
	High Filter at 10 KHz	−7dB
Damping Factor	8 ohms	30
Power Line Voltage/Frequency		
	120V (or 220V/240V)/50/60 Hz	
Power Consumption	Maximum	210W
Working Semiconductor Devices		
	FET	2
	IC	2
	Transistor	47
	Diode	25
Dimension	Width	455 m/m 18"
	Depth	370 m/m 14–5/8"
	HEIGHT	137 m/m 5–3/8"
Weight		10 kg/22 Lbs

You have just approached an exciting new dimension in music listening enjoyment. With your purchase of the Nikko **STA–7070** *Stereo Receiver, you have secured a measure of "Daily Happiness" for yourself and your family.*

Nikko, translated, means just that . . . "Daily Happiness." It is the job of this fine receiver to do some translating for you . . . to take broadcast electronic impulses and transform them into the enveloping experience of music. To deliver soothing . . . stimulating . . . entertaining listening pleasure, making everyday listening an enjoyable event!

This **STA–7070** *Stereo Receiver is a sophisticated instrument . . . developed by some of the world's most creative, technically proficient engineers. This Nikko Receiver is the product of one of the world's leading electronic component manufacturers!*

The Nikko **STA – 7070** *is designed to achieve the ultimate in stereophonic performance, incorporating many of the latest technological advances:*

Field Effect Transistors (FET)

Integrated Circuits (I.C.) for superior sensitivity.

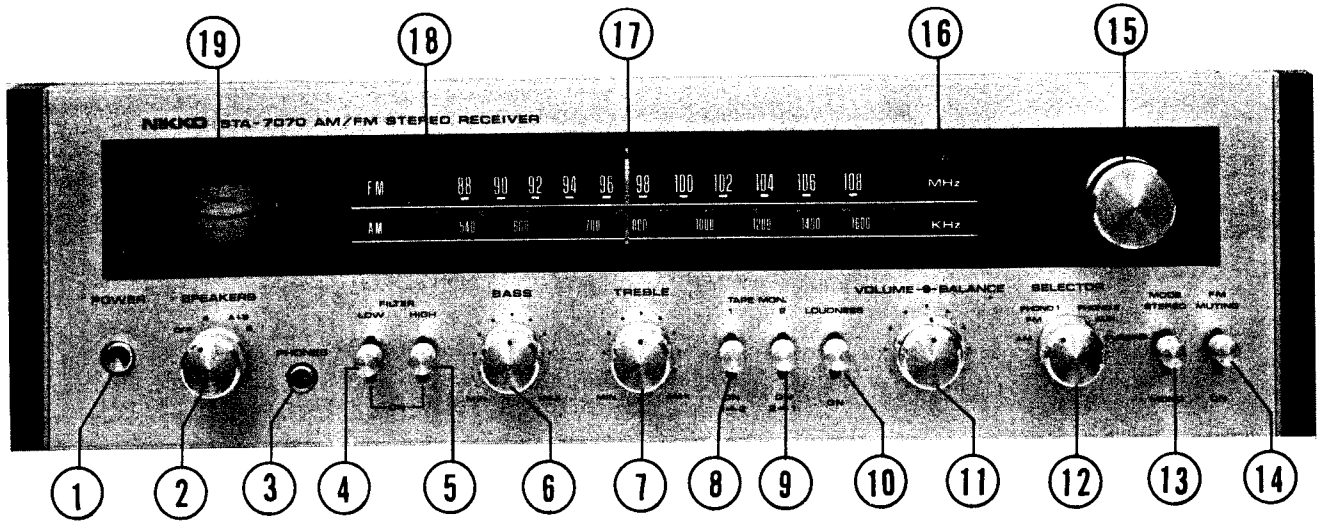
Triple Circuit Breaker Protection for malfunction-free dependability.

This manual has been prepared to help you get the maximum performance from your Nikko Receiver. The step-by-step "How To Operate" instructions, Function Explanations and Connection Diagram will add to your knowledge . . . and enable you to "tune yourself in" . . . to the many years of "Daily Happiness" that lie ahead.

PRINTED IN JAPAN

NIKKO

EXPLANATION OF FRONT PANEL



1. **POWER SWITCH**
Pressing this switch will permit the STA - 7070 to operate, and repressing will turn this receiver to "OFF"

2. **SPEAKER SYSTEM SELECTOR SWITCH**
OFF: Turn to "OFF" when using headphones.
A: Turn to "A" only when operating A speaker system.
A+B: Turn to "A+B" when operating A and B speaker system simultaneously.
B: Turn to "B" when operating B speaker system.

3. **HEADPHONE JACK**
Plug stereo headphone cord into this jack for private or monitoring listening pleasure.

4. **LOW FILTER SWITCH**
Switch "ON" to eliminate low frequency rumble noise from incoming signal.

5. **HIGH FILTER SWITCH**
Switch "ON" to eliminate high frequency scratch noise from incoming signal.

6. **BASS CONTROL**
Click - stops in 5 steps at each of plus and minus sides.

7. **TREBLE CONTROL**
Click - stops in 5 steps at each of plus and minus sides.

8. **TAPE MONITOR SWITCH TAPE 1**
TAPE DUBBING SWITCH TAPE 1 – TAPE 2.
Push down this switch to check tape recording with headphone. (The tape recorder or deck should be equipped with separate recording and playback head.) When setting FUNCTION SELECTOR SWITCH (#12) to the "DUBBING" position, TAPE 1 plays and TAPE 2 records so that duplication from TAPE 1 to TAPE 2 can be made.

9. **TAPE MONITOR SWITCH TAPE 2**
TAPE DUBBING SWITCH TAPE 2 – TAPE 1.
Push down this switch to check tape recording with headphones. (The tape recorder or deck should be equipped with separate recording and playback head.) When setting FUNCTION SELECTOR SWITCH (#12) to the "DUBBING" position, TAPE 2 plays and TAPE 1 records so that duplication from TAPE 2 to TAPE 1 can be made. In addition to tape monitoring, 4-channel adaptor can be connected. In this case, the switch must be in the "ON" position.

10. **LOUDNESS SWITCH**
Switch in "ON" position compensates for frequency loss at low volume levels.

11. **VOLUME CONTROL (OUTER KNOB)**
For low volume, turn left; for high volume, turn right.
BALANCE CONTROL (Inner knob): Click-stops at the top center position.

12. **FUNCTION SELECTOR SWITCH.**
AUX: Select AUX. 1 or AUX. 2 according to the output level of auxiliary accessory to be used. Turn to "AUX" when using other auxiliary audio accessories such as crystal or ceramic type cartridge, tape recorder with peramplifier, television output, etc.
AM: Turn to "AM" when receiving AM broadcast.
FM: Turn to "FM" when receiving FM mono or multiplex stereo broadcast.
PHONO 1. Turn to "PHONO 1" when playing manual or automatic record player equipped with magnetic type cartridge.
PHONO 2. Turn to "PHONO 2" when playing manual or automatic record player equipped with magnetic type cartridge.
DUBBING: When making tape-to-tape duplication, perform along with TAPE MONITOR SWITCH 1 or 2 turned on as desired.

13. **MODE SWITCH**
A mode switch to allow you to select Monophonic or Stereophonic operation to fit your need.

14. **FM MUTING SWITCH**
Switch "ON" to eliminate unwanted between station background noise.

15. **TUNING KNOB**
By turning this knob, you select the desired station frequency.

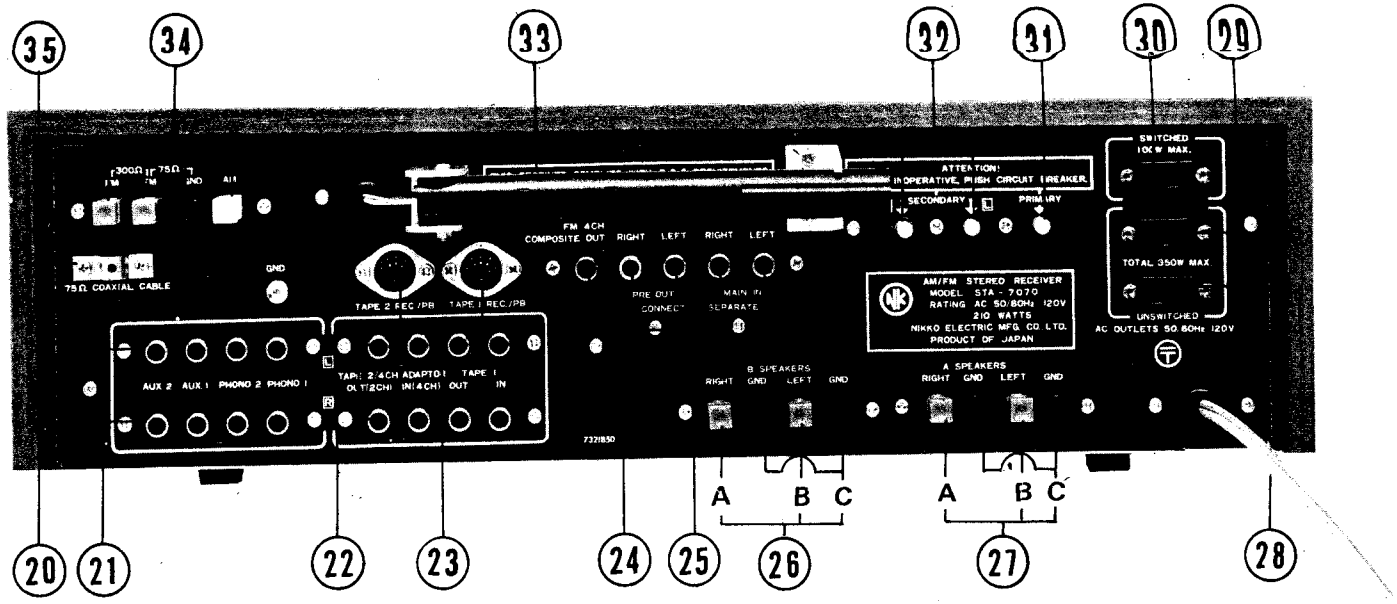
16. **STEREO INDICATOR LIGHT**
It lights up, to visually indicate STEREO FM MULTIPLEX broadcast reception.

17. **STATION FREQUENCY INDICATOR**
Points out station frequency received.

18. **FREQUENCY INDICATOR DIAL**
Clear and easy-to-read slide rule dial that indicates precise STATION FREQUENCY location.

19. **SIGNAL STRENGTH METER**
When Turning Knob (#15) is turned to desired station, meter should show maximum reading.

EXPLANATION OF REAR PANEL



20. GROUND TERMINAL
Earth ground connection for RECORD PLAYER.

21. INPUT–TERMINALS
AUX–1 HIGH LEVEL Should be selected according to the output
AUX–2 LOW LEVEL level of auxiliary accessory to be connected.
PHONO 1 Plug cables of manual or automatic record player equipped with magnetic type cartridge into these jacks.
PHONO 2 Plug cables of manual or automatic record player equipped with magnetic type cartridge into these jacks.
(Should select PHONO 1. or PHONO 2 for connection).

22. TAPE IN/OUT TERMINALS
TAPE 1. IN: Connect the output plug of the tape deck into this jack for playback of the tape deck and TAPE MONITOR SWITCH (#8) is in the on position for monitoring the recording by the tape deck.
OUT: Connect the input plug of the tape deck into this jack.
TAPE 2. IN: Connect the output plug of the tape deck into this jack for playback of the tape deck and TAPE MONITOR SWITCH (#8) is in the on position for monitoring the recording by the tape deck.
OUT: Connect the input plug of the tape deck into this jack.

23. TAPE REC/P.B (DIN TYPE CONNECTOR)
TAPE 1 This connector is an extra input and output terminal for European type recorder.
TAPE 2 This connector is an extra input and output terminal for European type recorder.
(Connect 4 - channel adaptor with TAPE MONITOR SWITCH (#9) turned on.)

24. MAIN IN/OUT SWITCH
CONNECT/SEPARATE– Must be set to the "SEPARATE" position only when connecting multi-amplifiers or 4 - channel adaptor. (See #25.)

25. MAIN INPUT/PRE OUTPUT/FM 4CH OUT PUT TERMINAL
MAIN INPUT (R/L): Main amplifier input terminals; for use when it becomes necessary to bypass the STA-7070 pre-amplifier. This function is accomplished in conjunction with switch (#24) located in the rear of the STA-7070.
PRE OUTPUT (R/L): Provides output of pre-amplifier signals at these terminals from the STA-7070 pre amplifier.
FM 4CH OUTPUT: Connect FM broadcast 4-channel adaptor.

26. SPEAKER TERMINALS (SPEAKER SYSTEM B)
A. Connect right-side speaker cables to terminals "RIGHT" and "GND".
B. Connect left-side speaker cables to terminals "LEFT" and "GND".
C. "GND" markings are for correct phasing of both speakers.

27. SPEAKER TERMINALS (SPEAKER SYSTEM A)
A. Connect right-side speaker cables to terminals "RIGHT" and "GND".
B. Connect left-side speaker cables to terminals "LEFT" and "GND".
C. "GND" markings are for correct phasing of both speakers.

28. POWER SUPPLY CORD
Connect this cord into electrical AC receptacle.

29. AC OUTLET (Unswitched)
Accessory power outlet. AC always available when receiver is plugged into AC receptacle and is not controlled by the Main Power Switch (#1).
Maximum capacity is 350 watts.

30. AC OUTLET (Switched)
This outlet is connected to, and turned "ON" and "OFF" by the Main Power Switch (#1).
Maximum capacity is 100 watts.

31. CIRCUIT BREAKER (Primary)
The primary circuit breaker protects the receiver from major damage due to overload or short circuit..

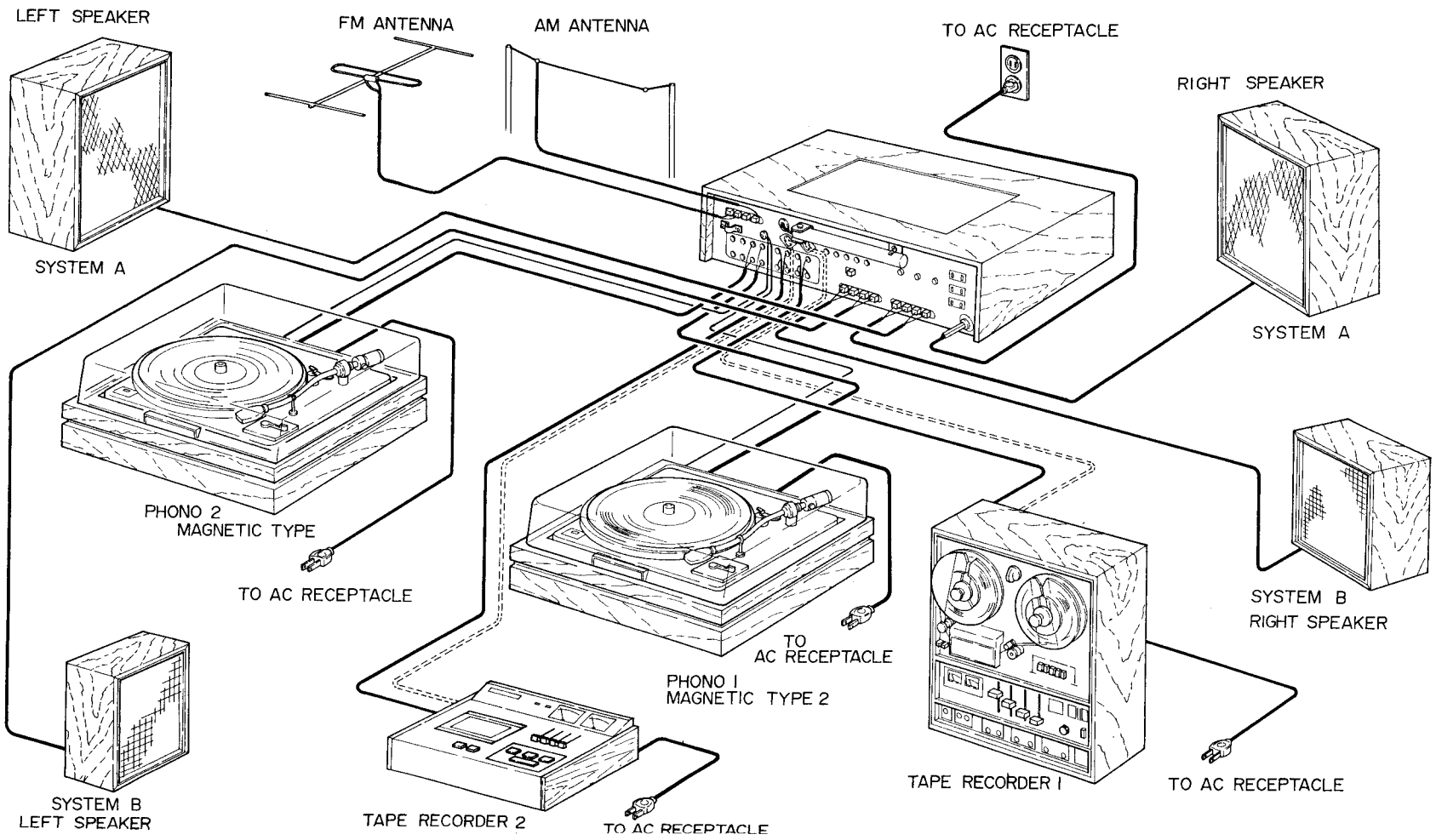
32. CIRCUIT BREAKER (Secondary)
LEFT and RIGHT outputs are protected against overload with their respective circuit Breaker provided. When the output is unavailable, press the red reset buttons. When the circuit breakers reoperate even after pressing the red buttons, the STA-7070 is in trouble. Check the speaker output cords for short-circuit.

33. AM BAR ANTENNA
Adjust this bar for optimum AM broadcast reception with minimum noises.

34 ANTENNA TERMINALS
FM – FM – GND AM
300Ω 75Ω
Connect balance-type antenna with an impedance of 300 ohms to FM terminals and unbalance-type antenna of 75 ohms to FM and GND terminals.

35. 75Ω COAXIAL CABLE
When the FM antenna is of 75-ohms coaxial cable type, the outer earth conductor of the cable must be held with this holder and the inner conductor connected to FM terminal.

CONNECTION DIAGRAM



HOW TO OPERATE

1. POWER SUPPLY CORD (#28) should be connected to electrical receptacle after all other necessary connections have been made.
2. Make sure POWER SWITCH (#1) is in the "OFF" position.
3. Connect speaker to SYSTEM B (#26) or SYSTEM A (#27).
4. Connect other components to their respective connectors on the rear panel.
5. Turn FUNCTION SELECTOR SWITCH (#12) to desired position.
6. Set STEREO/MONO (MODE) SWITCH (#13) to desired mode. Pressing it down will turn mode to mono.
7. Set VOLUME CONTROL (#11, louter knob) to zero position and BALANCE CONTROL (#11, Inner knob), BASS CONTROL (#6) and TREBLE CONTROL (#7) to center position.
8. Set TAPE MONITOR SWITCH (#8 & 9) to their respective level positions.
9. Turn LOUDNESS SWITCH (# 10), FM MUTING SWITCH (# 14), LOW FILTER SWITCH (# 4) and HIGH FILTER SWITCH (# 5) to their respective LEVEL position.
10. Turn SPEAKER SYSTEM SELECTOR SWITCH (#2) to desired position.
11. After checking each of the instructions above, connect POWER SUPPLY CORD (#28) to electrical receptacle.
12. Press POWER SWITCH (#1) to turn on the STA7070.
13. Turn VOLUME CONTROL (#11, outer knob) to adjust speaker output levels.
14. Turn BASS CONTROL (#6) and TREBLE CONTROL (#7) to adjust low and high frequencies as desired.
15. AM RECEPTION: Set FUNCTION SELECTOR SWITCH (# 12) to "AM" and turn TUNING KNOB (# 15) until you catch desired station with maximum reading of SIGNAL STRENGTH METER (#19).
16. FM MULTIPLEX or MONOPHONIC RECEPTION: Set FUNCTION SELECTOR SWITCH (# 12) to "FM" and turn TUNING KNOB (# 15) until you catch desired station with maximum reading of SIGNAL STRENGTH METER (#19).
17. MPX STEREO INDICATOR LIGHT (#16) automatically lights up when FM multiplex broadcast is received.
18. HIGH FILTER SWITCH (#5) should be in the "ON" position to eliminate noise of FM broadcast reception, record player, tape recorder.
19. Refer to "EXPLANATION" for operations of other program sources (record player, tape decks, etc.)

NOTE: Check CIRCUIT BREAKER when the STA7070 does not work even if all the necessary connections are properly made. Push the reset buttons (#31 & 32, RED) of the circuit breakers.

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